



redpoint



rotaro



rotaro T

# Hand-Held ..... Tachometers

Exceptional flexibility with...



...precision, simplicity & VALUE



# Hand-Held Tachometers

## Delivering Precision & Value .....

Exceptional design, the latest technologies and world-class fabrication techniques are just a few of the unique qualities defining Rheintacho's family of hand-held tachometers, which accurately measure rotational or surface speed as well as length.

### Informative LCD

The easy-to-read LCD display provides a wealth of valuable information including the measured value, selected engineering units, as well as an indication of the selected measuring mode; contact or non-contact.

### Built-in memory

When making use of the built-in memory function, the maximum, minimum, average and last value is automatically stored and easily recalled to the display by pressing the MEM key.

### Complete kits

Each unit is supplied with all the necessary accessories in an attractive, protective carrying case. Each attachment has been carefully designed to provide optimal mechanical stability to insure accurate, reliable and repeatable measurements.

### Auto power off function

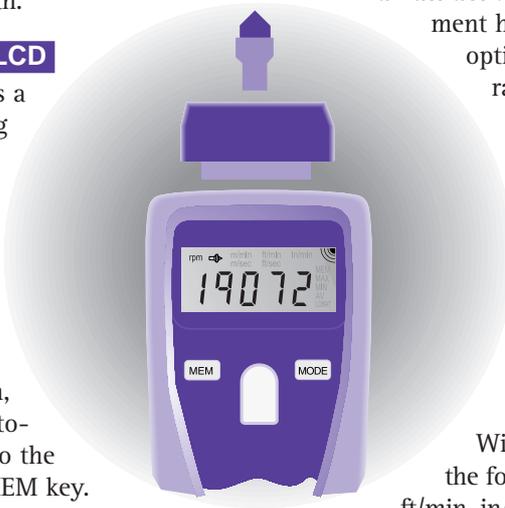
The "auto power off" function ensures that the batteries aren't dead the next time you urgently need to use the hand-held tachometer. After 30 seconds from the last measurement, it turns off automatically.

### Mode key

With the MODE key, you can select any of the following engineering units: (rpm, m/min, ft/min, in/min, ft/sec, m/sec, m, ft, in).

### Certified accuracy

Each tachometer is supplied with a Calibration Certificate validating that its operating performance meets or exceeds its published specifications.



## Exceptional performance runs in the family

Several models are available, each delivery un-matched performance and value, for both contact and non-contact RPM, surface speed and length measurement as detailed below.

### Redpoint

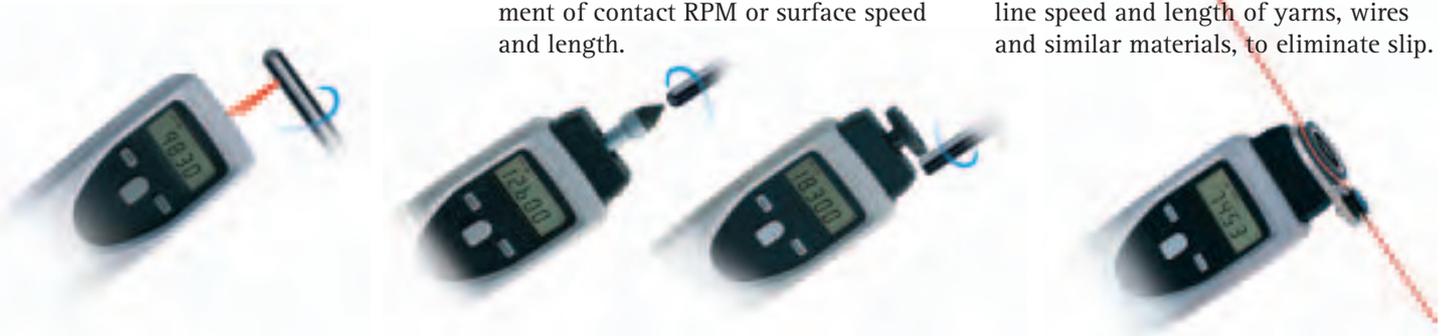
Without requiring contact, it uses a precise beam of light together with a piece of reflective tape affixed to the rotating element to accurately measure its rotational speed.

### Rotaro

In addition to the Redpoint functions, Rotaro permits the user to connect a mechanical adapter that accepts a variety of contact tips, as well as a surface speed wheel, for precise measurement of contact RPM or surface speed and length.

### Rotaro T

In addition to all functions performed by both Redpoint & Rotaro, Rotaro T is supplied with a special contact adapter specifically designed to maximize surface contact when measuring the running line speed and length of yarns, wires and similar materials, to eliminate slip.



## Quick rotational-speed checks in a multitude of applications

This equipment is just as important in the implementation and day to day operations of machinery and systems as it is for maintenance. These devices are also very helpful for checking production systems as well as research and development laboratories. Within seconds you know what condition your systems are in.

### Example applications

**are:** motors, turbines and pumps; centrifugals, conveyors; paper, foil, and textiles production systems; spool and transformer coiling machines; tool machines and others.



## Specification

		Redpoint	Rotaro/Rotaro T
<b>Accuracy</b>			
	±0.02% v. reading ± 1 Digit	✓	✓
<b>Measuring Ranges rpm</b>			
optical	1 ... 99999 min <sup>-1</sup>	✓	✓
mechanical	1 ... 19999 min <sup>-1</sup>		✓
<b>Speed</b>			
	Ø 01 m	Ø 6"	Ø 12"
m/min	0.10 ... 1999	0.10 ... 1524	0.40 ... 609.6
ft/min	0.40 ... 6550	0.40 ... 5000	0.40 ... 2000
in/min	4.00 ... 78700	4.00 ... 60000	4.00 ... 24000
m/sec	0.10 ... 33,30	0.10 ... 25.40	0.10 ... 10.16
ft/sec	0.10 ... 109	0.10 ... 83.33	0.10 ... 33.33
<b>Length</b>			
	0 ... 99999 m / 0 ... 99999 ft / 0 ... 99999 in		✓
<b>Sensing Distance (optical)</b>			
	max. 600 mm (24 in)	✓	✓
<b>Operation</b>			
Battery type	2x AA Battery or rechargeable	✓	✓
Operating Temperature	0 ... +50 °C (32 ... 122°F)	✓	✓
Storage Temperature	-20 ... +70 °C (0 ... 160°F)	✓	✓
<b>Housing</b>			
Material	ABS	✓	✓
Weight	250 g	✓	✓
Size	175x60x28 mm (7x2,5x1 inch)	✓	✓

# Digital Handtachometer Redpoint / Rotaro / Rotaro T



The new hand-tachometer is available in 3 types:

1. Optical (rpm)  
Over a distance of 60 cm, the new tachometer detects the revelation signals through a reflecting tape.
2. Optical and mechanical:  
In addition, this type can work with total 3 selectable measuring wheels (10cm, 6", \*12") or with a funnel or corn tip, speed or length in different measurements units.
3. This special type can also measure through a special adapter, speed and length of different yarns and cables. This version includes all function above.

\*Option

Function:

- Selectable units:  
Optical: rpm  
Mechanical: rpm, m/min, ft/min, in/min, m/s, ft/s, m, ft, in.
- High protected against ambient light
- Scanning distance: 60cm with small, sharp light spot
- Battery lifetime  $\geq 40$  hours also good for rechargeable batteries
- Memory function selectable:  
Last value, min, max, average
- Protection holster
- Shipped out in a case with space for all accessories.

Rheintacho offers you the best opportunity to be successful in the market. The new Digital Hand Tachometer are available neutral or with YOUR private label, including a neutral product manual. An Attractive service and dealer conditions gives you the power to brake into the market and to beat the competitor. Please call us for helping you to create your product leaflets. We will assist you with product photos and promotion materials!

## Ordering Information:

Article Nr.	Type	Features
A5-1100	Redpoint3.0	RPM measurement by beam of light and reflection marker
A5-1000	Rotaro 3.0	RPM measurement by beam of light and reflection marker or by measuring point; measurement of speed and length by measuring wheel
A5-2200	RotaroT3.0	Same features as the Rotaro with an additional special adapter for thread or wire

Inclusive					0,1 m	6"			
Redpoint							✓	✓	✓
Rotaro		✓	✓	✓	✓	✓	✓	✓	✓
Rotaro T	✓	✓	✓	✓	✓	✓	✓	✓	✓

More accessories on request

### Rheintacho

is a flexible, highly-efficient partner – wherever speed must be measured, monitored or controlled. Innovation, the most modern production techniques and equipment, meticulous quality control along with a first-class workforce are the corner stones of our company.

For the past 100 years, Rheintacho has used our extensive knowledge and experience to developed sensors, systems and customized solutions to meet our customer's requirements in a professional, cost-effective manner.

Shown on the right, are several other products in our complete product range.

### Non-contact speed sensors

These enable speeds to be read with the highest accuracy in the most severe environment. Depending on the application, we can offer sensors with various measurement principles in a wide variety of styles and connection types.



### Other Hand-held instruments

The new hand-held stroboscope measures and tests rotational and vibrational movements even in places which are difficult to access. It does this without any encroachment whatsoever in the system to be tested. When the displayed strobe frequency equals the true speed, the moving part will appear stationary.



### Speed Monitor

The programmable speed monitor observes the movement of motors, machines, and systems. Because of its variety of functions and its variable programmable options, the speed monitor is flexible enough to fit in with various system requirements.



### Analogue Indication Systems

Mechanical and electrical Tachometers are still important in our digital world. The mechanical Tachometers are a dependable robust a form of speed indication witch is cost effective and simple maintain. The combination of a tacho-generator in conjunction with an electrical indicator is a system for witch no main supply is required.



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# Product-information: Handheld Tachometer

**Three  
In  
One!**

**NEW!**



Handheld Tachometer in three variations:

1. Optical / non contact measurement of rotation speed, by using a reflective strip
2. Contact measurement by using an additional adapter (cone tip or speed wheel) for linear speed and length.
3. Special type with special adaptors for measurement the speed and length of yarns, wires and other filaments by using a unique "wrapper" roller.

The new Pocket Strobe™

**Two  
In  
One!**



**NEW!**

1. Measurement of rotation speed (RPM)  
By tuning the flash rate, you can make the target appear as it is "frozen"  
The LCD display shows in this situation the flash rate (FPM = RPM)
2. Inspection of moving parts.  
Because of the strobe effect, you can inspect moving parts precisely.  
You see a standing pictures or a slow motion image as desired. This principle works for e.g. deformed fan blades, loose parts on vibration test tables or to check the condition of textile or printing machines.



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Pocket Strobe™

# rolux



**800 lux**



**The flash package**

Incredibly handy,  
extremely bright



# rolux Pocket Strobe™

## Persuasively handy

Intelligent power management and practical functionality make this the David among the stroboscopes. At barely a quarter of the size of ordinary stroboscopes, the Pocket Strobe™ can be operated with one hand, making it easy to measure even in hard to access locations.

### LCD

The LCD displays the current flash rate with digital accuracy, as well as indicators which show when the strobe is operating in external mode and shows a low battery condition a few minutes of operating time remaining.

### Dynamically adjustable flash rate

The intelligent adjustment wheel monitors the speed at which the user is rotating it and changes the flash rate accordingly. This makes it extremely easy and quick to set a precise flash rate throughout the Pocket Strobe range.

### High adjustment accuracy and stability

Each measuring instrument is supplied with a test certificate which verifies its high quality and accuracy. Once the flash rate is set, forget it! It will not drift!

### Tripod connection

Using a standard tripod, you can create stable strobe-light conditions for taking photographs and making observations.

## Static in movement as a measuring principle

The **rolux** Pocket Strobe™ measures and tests rotation and vibration movements. It achieves its results entirely without interfering in the system you are testing. If the flash frequency of the stroboscope lamp corresponds to the movement frequency, the test object appears motionless. If the flash frequency deviates from the movement frequency slightly, the object appears to move slowly at the difference in frequency.



### Automatic triggering

If you connect an external trigger signal, the device automatically synchronises the flash sequence to this signal.

### High-performance battery pack

The device uses environmentally friendly NiMH rechargeable batteries, provide high charge capacity that is stable over many charging cycles. With the battery pack completely charged, you can operate the device for at least an hour regardless of the flash rate.

### Automatic charging system

The battery charger features a wide range power input permitting it to be used worldwide. The microprocessor-controlled Battery Charger has several automatic functions such as quick charge, overcharge protection and trickle charge functions maximizing the useful life of the NiMH battery pack.

## •••••and intense

The power-optimised electronics combined with a powerful Xenon flash lamp achieve significantly higher light output at lower power consumption compared to conventional systems. Therefore, despite its small size, the Pocket Strobe performs at the same level of performance as the larger stroboscope alternatives.



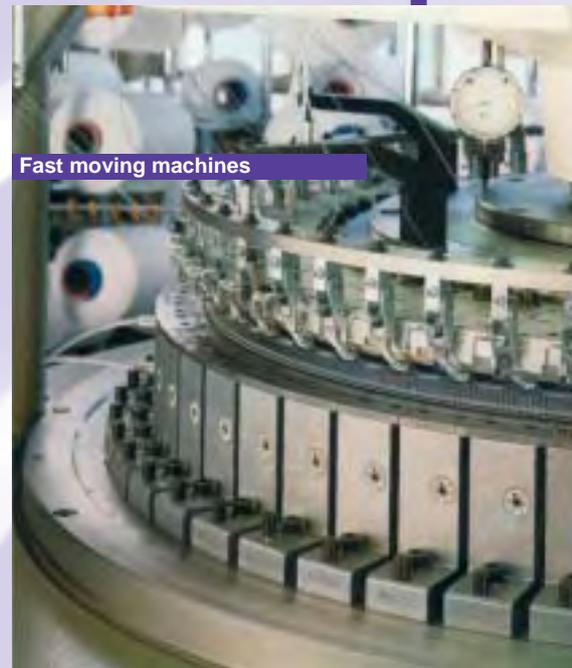
Rotating parts

## System checks without stopping production

The device determines the speed of rotation or frequency of oscillation when it is not possible to interfere with the system, for example, during a production run, in difficult to access places or with especially sensitive systems. Furthermore, you can use it to slow down fast moving objects or processes, drift measurement, detection of undesired harmonic resonance in devices and machine parts or unbalance conditions. The Pocket Strobe™ also has numerous applications in checking fast cyclical processes.



Vibrating systems



Fast moving machines

**Example applications include:** Motors, turbines and pumps; fans, mixers and centrifuges; paper, film and textile production systems; vibration measuring tables, jiggling sieves and oscillating sieves.

## Specification

Display Parameters	
Range	30 ... 12500 FPM (flashes per minute)
Accuracy	+/- 0,01 % from Display +/-1 digit
Resolution	+/-1 digit
Repeatability	+/-1 digit
Display	5-digit LCD-Display

Flash Tube Parameter	
Use	Rechargeable Battery
Flash Duration	< 20 µs
Light Emission / Range	800 Lux / 20 cm / 8"
Flash Color	6000 ... 6500 K
Flash Energy	max. 150 mJ

Electrical Specification	
Power source	Rechargeable Battery
Continuous Use Time	min. 1 h over 30 ... 12.500 FPM on 23°C/73°F
Battery Protection	yes

External Trigger Input	0 ... 5 V DTL/TTL compatible 3,5 mm / 1/8" standard connector U <sub>out</sub> = 7,2 V unregulated
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Charger, Battery type	
Line Power Input for recharging	100 ... 240 V, 50/60Hz
Battery type	NiMH rechargeable Battery
Recharging Time	max. 3,5 h
Overload protection	yes
Trickle charge	yes

Housing	
Material	ABS
Size	240 x 65 x 40 mm / 9,5 x 2,5 x 1,5 inch
weight	465 g

Ambient Conditions	
Ambient Temperature	0°C ... 40°C (32° F... 104°F)

Certifications	
Printed CE-Conformity on request	

# rolux Pocket Strobe™

## Scope of delivery:



Device case with operating instructions and test certificate

Battery charger with 4 country adaptors

Trigger signal plug

## Accessories:



Belt bag with clip

Spare twin lamp set

www.rheintacho.de

### Die Rheintacho Messtechnik GmbH

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For the past 100 years, Rheintacho has used our extensive knowledge and experience to developed sensors, systems and customized solutions to meet our customer's requirements in a professional, cost-effective manner. Shown on the right, are several other products in our complete product range.



### Non-contact speed sensors

These enable speeds to be read with the highest accuracy in the most severe environment. Depending on the application, we can offer sensors with various measurement principles in a wide variety of styles and connection types.



### Hand-held instruments

Rheintacho's tried and tested hand-held instruments record rotational speeds and running length. There is a choice of non-contact measurement by means of light and a reflective mark applied on the object to be measured, or contact measurement with special attachments for various applications.



### Speed Monitor

The programmable speed monitor observes the movement of motors, machines, and systems. Because of its variety of functions and its variable programmable options, the speed monitor is flexible enough to fit in with various system requirements.



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